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AMENDMENTS TO THE DRAWINGS

\* Attached are eight (8) replacement sheets to replace the six (6) sheets of drawings currently of record.

Fig. 2 has been amended to add a lead line from reference number 66 in the upper left hand corner to the corresponding structure.

Fig. 3 has been amended to delete reference number 78 and the lead line corresponding thereto.

Figs. 8, 9a, 9b, and 9c are added herein.

All of the drawings have been amended to change the sheet numbers in correspondence with the addition of the new drawing sheets.

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REMARKS

Claims 3, 9, 28, 30, 31, 33-37, and 40-43 are currently pending and claims 2, 4, 5, 8, 11, 14, 16, 17, 20, and 21 remain withdrawn from consideration.

The following remarks are responsive to the final Office action dated September 20, 2005.

The primary reason for this AMENDMENT F AFTER FINAL is to place the application in better form for appeal. Specifically, Applicants have amended the application, as necessary, to overcome the Examiner's objections to the drawings and specification as set forth in paragraph 2, page 2 through paragraph 9, page 6. Thus, after entry of this amendment, the only remaining issues for appeal will be the claim rejections set forth at paragraph 11, page 10 through paragraph 13, page 11. In the event the Examiner maintains any objections to the drawings or specification, the undersigned respectfully request a telephone conference with the Examiner.

I. Response to Objection to Drawings

Figures 2 and 3

Figure 2 has been amended in response to the objection raised by the Examiner on page 3, paragraph 4 of the final Office action. Specifically, a line has been added from "66" to the attachment line, the structure it denotes. Accordingly, applicants request that Figure 2, as amended herein, be entered.

Figure 3 has been amended in response to the objection raised by the Examiner on page 4, paragraph 6 of the final Office action. Specifically, referenced number "78" has been deleted. Applicants request that Figure 3, as amended herein, be entered.

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Amendments to Figures 2 and 3 were previously submitted, but apparently not entered. As a result, Applicants are resubmitting amended Figures 2 and 3. It appears from the final Office action that the amendments to Figures 2 and 3 were not entered because the Examiner is of the opinion that previously submitted Figs. 8-9b were not in form for entry. Applicants contend however that the entry of amended Figures 2 and 3 into the record does not stand or fall with the entry of any other amended Figure. In other words, one or more drawings can be, and should be, entered into the record despite the fact the Examiner believes one or more other drawings are not in proper form for entry. Only the drawings the Examiner believe are not in proper form entry should be denied entry.

As a result, applicants request entry of amended Figures 2 and 3 into the record.

Figures 8, 9a, 9b, and 9c

Figures 8, 9a, 9b, and 9c have been added herein to address the objections raised by the Examiner in paragraphs 3-5 of the final Office action.

At paragraph 3, page 2, the Examiner indicates that Figures 8 and 9a-9b do not show the oriented web material as described or claimed. Figures 8 and 9c as submitted herein show the "oriented nonwoven loop material" as described and claimed.

Fig. 8 has been added to illustrate one of the loop fasteners 84, 85 as comprising an oriented nonwoven loop material secured to a substrate. Support for the adding Figure 8 can be found at least at page 23, lines 23-27 and in the claims of the application as originally filed.

Figure 9a shows the general orientation of the constituent fibers of the nonwoven loop material before the fibers have been

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oriented. Figure 9b has been added to show the nonwoven loop material being extended by the application of a force to orient the constituent fibers of the nonwoven loop material in the direction of the force. Figure 9c has been added to show the general orientation of the constituent fibers of the nonwoven web after the force has been applied. As can be seen, extending the web causes more of the constituent fibers to become oriented in the general direction of force than were oriented in that direction before the material was extended.

Moreover, the nonwoven loop material shown in figures 9c has been partially cut away to show the underlying substrate to which loop material is secured. Figures 9a and 9b show the nonwoven loop material before it is attached to the underlying substrate.

Support for adding Figs. 9a-9c can be found at least at page 27, line 8 to page 28, line 20 and the claims of the application as originally filed.

Figs. 8 and 9a-9c are submitted to place the drawings in proper form. The oriented nonwoven loop material and substrate as recited in the claims are now shown in the drawings.

## II. Response to Objections to the Specification

Applicants submit that the amendments to page 5 of the application are now in proper form for entry. In response to the Examiner's comments in paragraph 2, page 2 of the final Office action, Applicants have underlined the text added to and struck through the text deleted from the paragraph beginning with "Figure 9a". The paragraphs beginning with "Figure 9b" and "Figure 9a" are newly added paragraphs and therefore, are unmarked.

Accordingly, Applicants respectfully request entry of the amendments to page 5 of the application. Applicants thank

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Examiner Reichle for the guidance she provided on October 12, 2005 in a voice mail message she left for Patrick E. Brennan (Reg. No. 56,511) regarding placing the amendment to page 5 in proper form.

In response to the objections raised in paragraph 6 of the final Office action, Figure 3 is amended herein to delete reference numeral 78. Thus, the objection to the specification based on Figure 3 should be withdrawn.

With respect to the Examiner's position regarding the term "oriented nonwoven loop material", Applicants herein delete the definition of "oriented nonwoven loop material" added in Amendment E, which the Examiner contended was new matter. Applicants add herein a new definition of "oriented nonwoven loop material" to clarify that more of the fibers are aligned in the direction of force after the force was applied than were previously oriented in such a direction.

Based on the Examiner's statements in the carry over paragraph from page 6 to page 7 of the Office action, it is Applicants belief that the Examiner recognizes that the definition of "oriented nonwoven loop material" as submitted herein is support by Applicant's original disclosure. Nevertheless, support for adding the definition of "oriented nonwoven loop material" can be found in the declaration by Debra Durrance, one of the inventors of the present invention, which was submitted along with Amendment E. In paragraph 4 of the declaration, Ms. Durrance states that one of ordinary skill in the art would have understood at the time of the invention of the present application the term "oriented nonwoven loop material" to mean a web comprising fibers or filaments that is formed other than by weaving or knitting. The fibers in the web have a generally random orientation except that more of the

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fibers are generally parallel to a direction corresponding to a direction of force previously applied to the web. The orientation of the fibers would not be understood to be exclusively in the force direction or to be precisely parallel to the force direction. Figures 9a and 9b illustrate an oriented nonwoven loop material before and after a force are applied to the web to orient the web fibers. Figure 9a shows the general orientation of the fibers of the web before a force is applied thereto. Figure 9b, on the other hand, shows the general orientation of the fibers of the web after the force has been applied. *As illustrated, more of the web fibers are oriented in a direction generally parallel to the direction of the applied force after the force has been applied than before the force was applied.* Emphasis added.

The claims of the originally filed specification provide further support for the added definition of "oriented nonwoven loop material" and for the declaration of Ms. Durrance. Original claim 1, for example, recited in part an "oriented nonwoven loop material comprising a nonwoven web and produced by application of a force causing constituent fibers of the nonwoven web to become oriented in a direction of the applied force without substantial necking or gathering of the nonwoven web in a direction perpendicular to the applied force".

Original claim 6 recited, in part, an "oriented nonwoven loop material comprising a nonwoven web and produced by application of a force causing constituent fibers of the nonwoven web to become oriented in a direction of the applied force".

Original claim 12 recited, in part, an "oriented nonwoven loop material produced by application of a force causing constituent fibers of the nonwoven web to become oriented in a

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direction of the applied force without substantial necking or gathering of the nonwoven web in a direction perpendicular to the applied force".

Original claim 15 recited in part an "oriented nonwoven loop material produced by application of a force causing constituent fibers of the nonwoven web to become oriented in a direction of the applied force".

Original claim 22 was directed to a method of making a mechanical fastening system for an article comprising forming an oriented nonwoven loop material from a nonwoven web of substantially continuous fibers by drawing the nonwoven web using an applied force to align constituent fibers of the nonwoven web without substantial necking or gathering of the nonwoven web in a direction perpendicular to the applied force.

Original claim 24 was directed to a method of making a mechanical fastening system for an article comprising forming an oriented nonwoven loop material from a nonwoven web of substantially continuous fibers by drawing the nonwoven web using an applied force to align the constituent fibers of the nonwoven web.

Original claim 26 was directed to a method of making a mechanical fastening system for an article comprising forming an oriented nonwoven loop material from a nonwoven web of substantially continuous fibers by drawing the nonwoven web using an applied force to align the constituent fibers of the nonwoven web.

Accordingly, Applicant's original disclosure provides significant support for the definition of "oriented nonwoven loop material" as submitted herein.

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III. Response to Rejection of Claims under 35 USC §102/103

The response to rejection of claims set forth below is substantially the same as the response previously filed in Amendment E at page 19-27.

Claim 28

Claim 28 is directed to a mechanical fastening system for an article in which one of the fastening components of the fastening system comprises an oriented nonwoven loop material. The oriented nonwoven loop material comprises a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web.

Claim 28 stands rejected in view of EP 0 289 198 (Noel et al.) and WO 97/25893 (Weirich et al.). Claim 28 was previously amended to recite that "the oriented nonwoven loop material comprises a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web".

Where the claim term is expected to impart a distinctive structural characteristic, it should be considered a structural limitation even if couched in language that would implicate a particular manufacturing process. *In re Granero*, 162 U.S.P.Q. 221, 223 (CCPA 1979). In *Granero*, the claim was directed to "a composite" having among other things, "expanded perlite particles which are *interbonded one to another by the interfusion between the surfaces of the perlite particles while in a pyroplastic state to form a porous perlite panel.*" *Id.* at: 222 (emphasis added). In rejecting the claim, the Patent Office took the position that the bolded language was a process



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limitation, and that this language was the only thing that distinguished the claim from the prior art.

The court rejected this position stating:

"The trouble with the [Patent Office's] approach is that it necessarily assumes that claim 1 should be construed as a product claim containing a process, rather than structural limitation. However, it seems to us that the recitation of the particles as 'interbonded one to another by the interfusion between the surfaces of the perlite particles' is as capable of being construed as a structural limitation as 'intermixed,' 'ground in place,' 'press fitted,' 'etched,' and 'welded,' all of which at one time or another have been separately held capable of construction as structural rather than process, limitations." *In re Granero*, at 223.

The Court went on to say that the correct approach was to determine whether the prior art showed expanded perlite particles . . . interbonded one to another by interfusion between the surfaces of the perlite particles. *Id.* In other words, the claim was not to be treated as a product by process claim, but rather a product claim including the quoted structural limitation.

The approach mandated by *In re Granero* is the proper approach to the present application. The term "a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web" imparts a structural characteristic and should be treated as a structural, not a process, limitation. These terms are at least as clearly structural as the terms "interbonded . . . by

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interfusion", "intermixed," "ground in place," "press fitted," "etched," and "welded", terms that have previously been found to impart a structural characteristic. Moreover, MPEP §2173.05(g) requires that functional language in a claim "must be evaluated and considered, just like any other limitation of the claim for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used." The language the Examiner identifies as being process, is more akin to a functional description and must be given weight according to MPEP §2173.05(g).

If claim 28 is read for what it fairly conveys to one of ordinary skill in the art, including that recitation that a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web, claim 28 clearly distinguishes the art of record.

Noel et al. disclose a loop fastening material comprising a backing (22) of orientable material (defined by Noel et al. as a web that has a dimensionally unstable state; see column 4, lines 6-14), preferably a heat shrinking material, and a multiplicity of fibrous elements (28) extending outward from the backing (22). The fibrous elements (28) are intermittently secured to the backing (22) at spaced, fixed regions (32) along the length of each filament while the orientable backing is in an unstable state. Upon movement back to the stable state of the backing, the fibrous material is shirred (i.e., gathered) to form loops that can be connected to a hook material (52). In one embodiment, the backing is a heat shrinkable material and in another embodiment the backing is an elastomeric material.

Noel et al. lack any disclosure that the fibrous elements (28) are oriented in a selected direction by the application of

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a force in the selected direction to extend the web. The filaments (30) of the fibrous elements (28) are explicitly stated to be "untensioned" as applied to the substrate (22). (Noel et al., col. 6, ll. 28-32). Rather than the filaments (30), it is the backing (22) that is an unstable (e.g., shrinkable or stretched) condition when the fibrous elements are secured to the backing. *Id.* As a result, shirring of the fibrous elements (28) occurs when the backing moves to its stable condition. (Compare Fig. 3 to Fig. 2 of Noel et al.). Moreover no extension of any web of fibers in Noel et al. produces any particular orientation of the fibers.

In contrast, the nonwoven web of fibers of the loop material of applicants' first fastening component as recited in claim 28 has a greater number of fibers oriented in a selected direction by the application of a force in the selected direction to extend the web.

The Examiner incorrectly describes Noel et al. and misapplies it to the claimed invention. The action confuses the backing (22) of Noel et al. with the fibrous material (28). The action cites a number of sections of Noel et al. and concludes that these disclose "the mechanical fastening system is 50 and has a first fastening component 20 of oriented nonwoven loop material 30 attached to a substrate, e.g., 22".

Nowhere is there support for the position that Noel et al. discloses oriented nonwoven loop material. Noel et al. explains that its backing (22) (i.e., NOT the fibrous material (28)) is an "orientable material". However, Noel et al. uses the term "orientable material" to mean a material "having a dimensionally unstable state that is later transformed to its dimensionally stable state" (col. 3, ll. 38-41). There is no disclosure or suggestion that fibers in the backing become oriented upon

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extension, as is disclosed in by the present application. The fibrous elements (28) constitute the loop material. The fibrous elements (28) and the filaments (30) making up the fibrous elements are nowhere described in Noel et al. as being "oriented nonwoven loop material" as asserted by the Examiner.

At column 6, lines 28-36 Noel et al. disclose that the filaments (30) are preferably positioned on the backing (22) while the orientable material of the backing is in its heat unstable state "and while the filaments 30 are in an untensioned condition . . . ." Similar disclosure can be found at column 9, lines 10-17. The filaments (30) are untensioned when applied to the backing (22), and further they are compressed (shirred) when the backing moves to a stable condition.

It is not understood how in the face of an explicit disclosure in Noel et al. that the filaments are not tensioned that the Examiner can find that tensioning is disclosed. Not even by any possible negative implication of these explicit statements can one conclude that tensioning of the filaments (30) is disclosed or even remotely suggested. Loops are formed by Noel et al. through compression of the filaments so that they buckle upward to form loops. In sharp contrast, applicants use the fibers forming the web material as the loops. The loops exist before any manipulation of the web. Extension of the web of fibers produces a particular orientation of the fibers that improves interengagement of the hooks with the fiber loops.

Weirich et al. disclose a female component of a refastenable fastening device. The female component comprises an elastomeric adhesive backing (34) and a multiplicity of fibrous elements (30) extending from the backing. Weirich et al. disclose that the multiplicity of fibrous elements (30) may

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be a nonwoven web. According to Weirich et al., the female component is formed by securing the nonwoven web (30) to the elastomeric backing (34) while the backing is elongated so that when the backing is allowed to return to a relaxed state the nonwoven web is shirred (i.e., gathered). Nowhere do Weirich et al. disclose or even suggest that the nonwoven web (30) is extensible. Weirich et al. also do not teach that the nonwoven web the fibers in the web are oriented by extending the web. Rather, as disclosed at page 8, lines 17-19 of Weirich et al., the filaments (36) of the nonwoven web (30) are in an untensioned state when they are joined to the elongated backing (34).

Thus, Weirich et al. lack the same teachings as Noel et al. lack. In fact, the passages of Weirich et al. relied upon by the Examiner in support of her position (e.g., page 15, lines 13 et seq.) are substantially the same as that of Noel et al. That is, Weirich et al. teach that the filaments (36) could conceivably be in a tensioned condition. However, as discussed above, the term tensioned does not explicitly mean that the filaments are actually extended. Moreover, it is not inherent that the filaments are extended simply because they could conceivably be tensioned. For example, they may only be pulled taut and may even be inextensible. Finally, whether these filaments are tensioned are not, there is no teaching or suggestion that the tension produces an orientation in the direction of tension.

Thus, as was the case with Noel et al, Weirich et al. fail to show or suggest a nonwoven loop material comprising a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web as recited in claim

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28. Consequently, neither Noel et al. nor Weirich et al. anticipates or renders obvious claim 28.

For these reasons, claim 28 is submitted to be patentable over Noel et al., Weirich et al. and the other references of record.

Claims 3, 9 and 30-32, depending directly or indirectly from claim 28, are submitted as novel and patentable over Noel et al. for the same reasons as claim 28.

#### Claim 33

Claim 33 includes the same requirement argued above for claim 28. Accordingly, claim 33 is submitted as novel and patentable over Noel et al. and Weirich et al. for the same reasons as claim 28. Claims 34-47, depending directly or indirectly from claim 33, are submitted as novel and patentable over Noel et al. and Weirich et al. for the same reasons as claim 33.

#### Claims 40

Claim 40 is directed to a mechanical fastening system for an article, said fastening system comprising:

*a first fastening component comprising a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by drawing of the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of drawing than prior to drawing of the nonwoven web of fibers; and*

*a second fastening component comprising a hook material, the oriented nonwoven loop material of the first fastening*

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component being adapted for releasable connection with the hook material of the second fastening component.

Claim 40 is submitted as patentable in that none of the references of record, including Noel et al. and Weirich et al., show or suggest a mechanical fastening system including a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by drawing of the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of drawing than prior to drawing of the nonwoven web of fibers.

The requirement for the loop material to be oriented by drawing must be given weight as a structural limitation of claim 40 for the same reasons as given for giving the requirement for "a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web" in claim 28 as argued above. Noel et al. and Weirich et al. fail to show or suggest loop material being oriented by drawing as required by claim 40. Claim 41 depends from claim 40 and is patentable for the same reasons as claim 40.

#### Claims 42

Claim 42 is directed to a mechanical fastening system for an article, said fastening system comprising:

*a first fastening component comprising a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by application of force to the nonwoven web of fibers in a direction so that more of the fibers are oriented*

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*in the direction of force than prior to applying a force to the nonwoven web of fibers; and*

a second fastening component comprising a hook material, the oriented nonwoven loop material of the first fastening component being adapted for releasable connection with the hook material of the second fastening component.

Claim 42 is patentable over the reference of record for substantially the same reasons as set forth above with respect to claim 40. That is none of the references of record, including Noel et al. and Weirich et al., show or suggest a mechanical fastening system including a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by application of force to the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of force than prior applying a force to the nonwoven web of fibers.



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CONCLUSION

In view of the above, entry of the amendments to the specification and drawings is requested to place the application in better form for appeal.

Respectfully submitted,



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